PATENT COOPERATION TREATY

PCT

TRANSLATION INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

0000054918			FOR FURTHER ACTION	See Form PCT	VIPEA/416
	ional application No.		International filing date (day/mo	nth/year) Priority date (a	day/month/year)
PCT/EP2004/010491			18.09.2004	26.09.	2003
Internat	ional Patent Classifica	tion (IPC) or nati	onal classification and IPC	<u>'</u>	
C08L23/22, C08F290/04, C14C11/00, C14C9/00, D06M15/227, D06M15/27, D21H19/20, C04B41/48, B27K3/15					
Applica		.11119/20	, CU4D41/40, BZ	/KJ/ 1J	
	F AKTIENGE	SELLSCH	\FT		
1.			ninary examination report, establ e applicant according to Article 36	•	liminary Examining Authority
2.	This REPORT cons	ists of a total of	6 sl	neets, including this cover shee	et.
3.	This report is also a	ccompanied by A	NNEXES, comprising:		
	a. (sent to	the applicant and	to the International Bureau) a tota	al of	sheets, as follows:
			tion, claims and/or drawings which		
		ets containing restructions).	ctifications authorized by this Aut	normy (see Rule 70.16 and Sec	ction 607 of the Administrative
		disclosure in the	ede earlier sheets, but which this international application as filed		
			Puregu auby) a total of (indicate to	ros and mymbon of alcotronic o	anni an(a))
	b (sent to t	те тетинопи.	Bureau only) a total of (indicate ty	pe and number of electronic ca	arrei(s))
	related the	reto in computer	readable form only, as indicated		a sequence listing and/or tables
			rative Instructions).	in the Supplemental Box Ker	ating to sequence Eisting (see
4.	This report contains	indications relati	ng to the following items:		
	Box No. I	Basis of the	report		
	Box No. II	Priority			
	Box No. III	Non-establi	shment of opinion with regard to r	novelty, inventive step and indu	ustrial applicability
	Box No. IV	Lack of uni	y of invention		
	Box No. V		atement under Article 35(2) with a d explanations supporting such sta		p or industrial applicability;
	Box No. VI	Certain doc	uments cited		
	Box No. VI	I Certain defe	ects in the international application	1	
	Box No. VII	II Certain obs	ervations on the international appl	ication	
Date of submission of the demand		Date of co	mpletion of this report		
Name and mailing address of the IPEA/EP			Authorized	d officer	
Facsimi	le No.		Telephone	No.	

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/010491

Box	No. I	Basis of the report		
1.		h regard to the language, this report is based on the internation cated under this item.	onal application in the language in	which it was filed, unless otherwise
		This report is based on translations from the original langua which is the language of a translation furnished for the purpoint international search (Rule 12.3 and 23.1(b)) publication of the international application (Rule 12.4 international preliminary examination (Rule 55.2 and	ooses of:	,
2.	rece	h regard to the elements of the international application, this viving Office in response to an invitation under Article 14 as report): the international application as originally filed/furnished the description:		
		pages 1–35 pages*		as originally filed/furnished
		pages*		_
	\square		_ received by this Admoraly on	
		nos.		as originally filed/furnished
		nos.*	as amended (togethe	r with any statement) under Article 19
		nos.* _ 1-21	received by this Authority on	03.11.2005 with letter of 02.11.2005
		nos.*	received by this Authority on	
		the drawings:		as originally filed/furnished
		sheets*		
		sheets*	received by this Authority on	
		a sequence listing and/or any related table(s) – see Supplen		
3.		The amendments have resulted in the cancellation of:		
		the description, pages		
		the claims, nos.		
		41-4		
		the sequence listing (specify):		
4.		This report has been established as if (some of) the amend they have been considered to go beyond the disclosure as fi	dments annexed to this report and	listed below had not been made, since
		the description, pages		
		the claims, nos.		
		the drawings, sheets/figs		
		the sequence listing (specify):		
		any table(s) related to sequence listing (specify):		
*	If ite	em 4 applies, some or all of those sheets may be marked "sup	erseded."	

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/EP2004/010491

Box			ticle 35(2) with regard to novelty, inventive step or industrial applicability; oporting such statement	
1.	Statement			
	Novelty (N)	Claims	1-21	YES
		Claims		NO
	Inventive step (IS)	Claims	1-21	YES
		Claims		NO
	Industrial applicability (IA)	Claims	1-21	YES
		Claims		NO
2.	Citations and explanations (Rule 7	70.7)		

- 1 Reference is made to the following document:
 - D1: WO 96/28483 A (BASF AG; DANISCH PETER (DE);
 DIX JOHANNES PETER (DE); DENZINGER WALTE)

 19 September 1996 (1996-09-19)
- 2 CLAIMS 1-5
 - Document **D1** discloses (see **dispersion 3** and **test A3**, **B3** in the table on page 15) aqueous dispersions of a copolymer which is obtained by radical copolymerisation of maleic acid anhydride with a decene oligomer followed by cross-linking with water. The oligomer has an average molecular weight of 340 g/mol and a water content of 76.2%.
- 2.1 The subject matter of claim 1 thus differs from the known aqueous dispersions in that an isobutene oligomer is used as monomer (B) and in that the copolymer is reacted with a compound Ia or Ib.

 The subject matter of claim 1 is thus novel (PCT Article 33(2)).

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

The current invention can be considered to address the problem of developing aqueous dispersions which provide leather with improved water repellent finishing and fullness.

The solution to this problem as proposed in claim 1 of the present application involves an inventive step (PCT Article 33(3)) for the following reasons: D1 proposes (see page 3, lines 1-10) that the anhydride groups present in the copolymer may be solvolysised with hydroxy-functional compounds or with amines and that the monomer (B) may be an isobutene oligomer (see page 4, lines 10-12). Nevertheless, D1 does not suggest to a person skilled in the art the combination of monomers (B) and (D) as per the current claim 1, and does not indicate that such a combination leads to improved water repellent finishing and fullness.

2.2 Claims 2-5 are dependent on claim 1 and therefore likewise meet the PCT requirements for novelty and inventive step.

3 CLAIMS 6-15

Claims 6-15 are characterised by the subject matter of claim 1 and therefore likewise meet the PCT requirements for novelty and inventive step.

PCT/EP2004/010491 Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement 4 CLAIMS 16 AND 17 Document **D1** discloses (see **dispersion 3** and test A3, B3 in the table on page 15) copolymers which are obtained by radical copolymerisation of maleic acid anhydride with a decene oligomer followed by cross-linking with water. 4.1 The subject matter of claim 16 thus differs from the known copolymer in that an isobutene oligomer is used as monomer (B) and in that the copolymer is reacted with a compound Ia or Ib. The subject matter of claim 16 is thus novel (PCT Article 33(2)). The current invention can be considered to address the problem of developing aqueous dispersions which provide leather with improved water repellent finishing and fullness. The solution to this problem as proposed in claim 16 of the present application involves an inventive step (PCT Article 33(3)) for the following reasons: D1 proposes (see page 3, lines 1-10) that the anhydride groups present in the copolymer may be solvolysised with hydroxyfunctional compounds or with amines and that the monomer (B) may be an isobutene oligomer (see page 4, lines 10-12). Nevertheless, D1 does not suggest to a person skilled in the art the combination of monomers (B) and (D) as per the

current claim 1, and does not indicate that such a

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
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	FC1/EF2004/010491
Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
	combination leads to improved water repellent
	finishing and fullness.
4.2	Claim 17 is dependent on claim 16 and therefore
	likewise meets the PCT requirements for novelty
	and inventive step.
F	GT 2 TWG 10 01
5	CLAIMS 18-21
	Claims 18-21 are characterised by the subject
	matter of claims 1 and 16 and therefore likewise
	meet the PCT requirements for novelty and
	inventive step.